```
F 13

UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS           YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS           YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS           YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUU         UUU  EEE                    TTT        PPP                          SSS        YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS           YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS           YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS           YYY
```

```
**FILE**ID**SATSSS72




  SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    SSSSSSSS  77777777      222222
  SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    SSSSSSSS  77777777      222222
SS          AA      AA      TT      SS          SS          SS                  77  22      22
SS          AA      AA      TT      SS          SS          SS                  77  22      22
SS          AA      AA      TT      SS          SS          SS                  77          22
SS          AA      AA      TT      SS          SS          SS                  77          22
  SSSSSS    AA      AA      TT        SSSSSS      SSSSSS      SSSSSS          77          22
  SSSSSS    AA      AA      TT        SSSSSS      SSSSSS      SSSSSS          77          22
        SS  AAAAAAAAAA      TT              SS          SS          SS      77          22
        SS  AAAAAAAAAA      TT              SS          SS          SS      77          22
        SS  AA      AA      TT              SS          SS          SS    77          22            ....
        SS  AA      AA      TT              SS          SS          SS    77          22            ....
SSSSSSSS    AA      AA      TT      SSSSSSSS    SSSSSSSS    SSSSSSSS    77          2222222222      ....
SSSSSSSS    AA      AA      TT      SSSSSSSS    SSSSSSSS    SSSSSSSS    77          2222222222      ....


LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

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```

```
0000            .TITLE  SATSSS72 SATS SYSTEM SERVICE TESTS  $CRETVA (SUCC S.C.)
0000            .IDENT  'V04-000'
0000
0000    ;
0000    ;****************************************************************************
0000    ;*                                                                          *
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0000    ;*                                                                          *
0000    ;*                                                                          *
0000    ;****************************************************************************
0000    ;
0000
0000    ;++
0000    ; FACILITY:     SYSTST (SATS SYSTEM SERVICE TESTS)
0000    ;
0000    ; ABSTRACT:
0000    ;
0000    ;               THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000    ; WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS72 TO TEST SUCCESSFUL
0000    ; OPERATION OF THE $CRETVA SYSTEM SERVICE. THE SERVICE IS INVOKED
0000    ; UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000    ; SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE.  CORRECT
0000    ; OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000    ; CHECKING FOR AN SS$_NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000    ; AND EXPECTED FUNCTIONALITY PERFORMED.
0000    ;
0000    ; ENVIRONMENT:  USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000    ;               DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000    ;
0000    ; AUTHOR: THOMAS L. CAFARELLA,          CREATION DATE: JUL, 1977
0000    ;
0000    ; MODIFIED BY:
0000    ;
0000    ;         , : VERSION
0000    ; 01      -
0000    ;--
```

```
0000            .SBTTL  DECLARATIONS
0000    ;
0000    ; INCLUDE FILES:
0000    ;
0000            $PRVDEF                         ; PRIVILEGE BIT DEFINITIONS
0000            $PHDDEF                         ; PROCESS HEADER OFFSETS
0000            $PSLDEF                         ; PROCESSOR STATUS LONGWORD DEFINITIONS
0000    ;
0000    ; MACROS:
0000    ;
0000    ;
0000    ; EQUATED SYMBOLS:
0000    ;
0000    ;
0000    ; OWN STORAGE:
0000    ;
```

```
00000000                .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
    0000   TEST_MOD_NAME:: STRING  C,<SATSSS72>     ; TEST MODULE NAME
    0009   TEST_MOD_NAME_D: STRING I,<SATSSS72>     ; TEST MODULE NAME DESCRIPTOR
    0019   MSG1_INP_CTL:   STRING  I,<  SSCVA!4ZW: CONDITIONS:>
    0039                                           ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
    0039   MSG3_ERR_CTL::  STRING  I,< *SSCVA!4ZW: !AS>
    0051                                           ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
00000200  0051   PAGESIZE:       .LONG   512               ; PAGE SIZE IN BYTES
```

```
          00000000               .PSECT  RWDATA,RD,WRT,NOEXE,LONG
00000008  0000      PRIVMASK:    .BLKQ   1                ; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C  0008      PAGCNT_ERG:  .BLKL   1                ; PAGCNT ARGUMENT FOR EXPREG
00000014  000C      RETADR_ERG:  .BLKQ   1                ; RETADR ARGUMENT FOR EXPREG
0000001C  0014      INADR_CVA:   .BLKQ   1                ; INADR ARGUMENT FOR PRELIM CRETVA
00000024  001C      INADR:       .BLKQ   1                ; INADR ARGUMENT FOR SUBJECT CRETVA
0000002C  0024      RETADR:      .BLKQ   1                ; RETADR ARGUMENT FOR SUBJECT CRETVA
00000030  002C      STARTADDR:   .BLKL   1                ; STARTING ADDR OF CREATED AREA
00000034  0030      ENDADDR:     .BLKL   1                ; ENDING ADDR OF CREATED AREA
00000038  0034      DISPL:       .BLKL   1                ; NO. OF PAGES (DISPLACEMENT) TO CREATE
00000039  0038      NZERR:       .BLKB   1                ; NON-ZERO ERROR FLAG: 0 MEANS NO N-Z ERROR
```

```
                                   0039        .SBTTL  CONDITION TABLES
                                   0039  ;
                                   0039  ;     ***** CONDITION TABLES FOR CRETVA SYSTEM SERVICE *****
                                   0039  ;
                                   0039        COND    1,NOTARG,<PREVIOUS CONDITION OF CREATED PAGES>,-
                                   0039                <PREVIOUSLY CREATED BY CRETVA>,-
                                   0039                <PREVIOUSLY CREATED BY EXPREG>,-
                                   0039                <PREVIOUSLY NON-EXISTENT>,-
                                   0039
                                   00BC        COND    2,NOTARG,<ORDERING OF INADR PAIR>,-
                                   00BC                <1ST ADDR LESS THAN OR EQUAL TO 2ND ADDR>,-
                                   00BC                <1ST ADDR GREATER THAN OR EQUAL TO 2ND ADDR>,-
                                   00BC
                                   012F        COND    3,LONG,<ACMODE>,-
                                   012F                <KERNEL>,-
                                   012F                <EXEC>,-
                                   012F                <SUPER>,-
                                   012F                <USER>,-
                                   012F
                         00000000  015E                .LONG           PSL$C_KERNEL
                         00000001  0162                .LONG           PSL$C_EXEC
                         00000002  0166                .LONG           PSL$C_SUPER
                         00000003  016A                .LONG           PSL$C_USER
                                   016E  ;
                                   016E        COND    4,NOTARG,<LOCATION OF CREATED PAGES>,-
                                   016E                <END OF PROGRAM REGION>,-
                                   016E                <END OF CONTROL REGION>,-
                                   016E                <MIDDLE OF PROGRAM REGION>,-
                                   016E                <MIDDLE OF CONTROL REGION>,-
                                   016E
00000003 00000002 00000001 00000000  01F7                .LONG           0,1,2,3
                                   0207  ;
                                   0207        COND    5,NOTARG,<PAGE COUNT>,-
                                   0207                <ONE PAGE>,-
                                   0207                <SMALL COUNT>,-
                                   0207                <LARGE COUNT>,-
                                   0207
                         00000001  0240                .LONG           1
                         00000005  0244                .LONG           5
                         00000019  0248                .LONG           25
                                   024C  ;
                              00000000         .PSECT  SATSSS72,RD,WRT,EXE
                              0000   135         .SBTTL  TM_SETUP, TM_CLEANUP
                              0000   136 ;++
                              0000   137 ; FUNCTIONAL DESCRIPTION:
                              0000   138 ;
                              0000   139 ;               TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
                              0000   140 ; REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
                              0000   141 ; TEST MODULE EXECUTION.
                              0000   142 ;
                              0000   143 ; CALLING SEQUENCE:
                              0000   144 ;
                              0000   145 ;       BSBW TM_SETUP   BSBW TM_CLEANUP
                              0000   146 ;
                              0000   147 ; INPUT PARAMETERS:
                              0000   148 ;
                              0000   149 ;       NONE
                              0000   150 ;
                              0000   151 ; IMPLICIT INPUTS:
                              0000   152 ;
                              0000   153 ;       NONE
                              0000   154 ;
                              0000   155 ; OUTPUT PARAMETERS:
                              0000   156 ;
                              0000   157 ;       NONE
                              0000   158 ;
                              0000   159 ; IMPLICIT OUTPUTS:
                              0000   160 ;
                              0000   161 ;       TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
                              0000   162 ;                  ALL PRIVILEGES ACQUIRED.
                              0000   163 ;
                              0000   164 ; COMPLETION CODES:
                              0000   165 ;
                              0000   166 ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                              0000   167 ;
                              0000   168 ; SIDE EFFECTS:
                              0000   169 ;
                              0000   170 ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                              0000   171 ;       (VIA RSB) IF ERROR ENCOUNTERED.
                              0000   172 ;
                              0000   173 ;--
                              0000   174
                              0000   175
                              0000   176
                              0000   177 TM_SETUP::
                   52   D4    0000   178         CLRL    R2                      ; INITIALIZE
                   53   D4    0002   179         CLRL    R3                      ; .. CONDITION
                   54   D4    0004   180         CLRL    R4                      ; .... TABLE
                   55   D4    0006   181         CLRL    R5                      ; ...... INDEX
                   56   D4    0008   182         CLRL    R6                      ; ........ REGISTERS
                FFF3'   30    000A   183         BSBW    MOD_MSG_PRINT           ; PRINT TEST MODULE BEGIN MSG
00000000'EF  00000000'EF   DE    000D   184         MOVAL   TEST_MOD_SUCC,TMD_ADDR  ; ASSUME END MSG WILL SHOW SUCCESS
   03    00  00000000'8F   F0    0018   185         INSV    #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
             00000000'EF          0020
                              0025   186         MODE    TO,5$,KRNL              ; KERNEL MODE TO ACCESS PHD
        59   00000000'9F   D0    0048   187         MOVL    @#CTL$GL_PHD,R9         ; GET PROCESS HEADER ADDRESS
    00000000'EF      69   DE    004F   188         MOVAL   PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
                              0056   189         MODE    FROM,5$ ; BACK TO USER MODE
                              0057   190         PRIV    ADD,ALL                 ; GET ALL PRIVILEGES
```

```
                  0077    191           $SETPRN_S TEST_MOD_NAME_D          ; SET PROCESS NAME
                  0084    192           SS_CHECK  NORMAL                   ; CHECK STATUS CODE RETURNED FROM SETPRN
              05  00B2    193           RSB                                ; RETURN TO MAIN ROUTINE
                  00B3    194 TM_CLEANUP::
       FF4A'  30  00B3    195           BSBW     MOD_MSG_PRINT             ; PRINT TEST MODULE END MSG
              05  00B6    196           RSB                                ; RETURN TO MAIN ROUTINE
```

```
        00B7          .SBTTL  CONDITION SUBROUTINES - SETUP AND CLEANUP
        00B7    ;++
        00B7    ; FUNCTIONAL DESCRIPTION:
        00B7    ;
        00B7    ;               CONDX AND CONDX_CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
        00B7    ; BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
        00B7    ; CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
        00B7    ; ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
        00B7    ; CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
        00B7    ; UP, IF NECESSARY, IN THE CONDX_CLEANUP SUBROUTINE. THIS INCLUDES,
        00B7    ; ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
        00B7    ; OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
        00B7    ; VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
        00B7    ; (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
        00B7    ;
        00B7    ; CALLING SEQUENCE:
        00B7    ;
        00B7    ;       BSBW CONDX   BSBW CONDX_CLEANUP
        00B7    ;         WHERE X = 1,2,3,4,5
        00B7    ;
        00B7    ; INPUT PARAMETERS:
        00B7    ;
        00B7    ;       CONFLICT = 0
        00B7    ;
        00B7    ; IMPLICIT INPUTS:
        00B7    ;
        00B7    ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
        00B7    ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
        00B7    ;
        00B7    ; OUTPUT PARAMETERS:
        00B7    ;
        00B7    ;       CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
        00B7    ;
        00B7    ; IMPLICIT OUTPUTS:
        00B7    ;
        00B7    ;       R2,3,4,5,6 PRESERVED
        00B7    ;
        00B7    ; COMPLETION CODES:
        00B7    ;
        00B7    ;       NONE
        00B7    ;
        00B7    ; SIDE EFFECTS:
        00B7    ;
        00B7    ;       NONE
        00B7    ;
        00B7    ;--
        00B7
        00B7
        00B7
        00B7    COND1::
   05   00B7            RSB                                     ; RETURN TO MAIN ROUTINE
        00B8    COND1_CLEANUP::
   05   00B8            RSB                                     ; RETURN TO MAIN ROUTINE
        00B9    COND2::
   05   00B9            RSB                                     ; RETURN TO MAIN ROUTINE
        00BA    COND2_CLEANUP::
   05   00BA            RSB                                     ; RETURN TO MAIN ROUTINE
```

```
    00BB   255 COND3::
05  00BB   256          RSB                                 ; RETURN TO MAIN ROUTINE
    00BC   257 COND3_CLEANUP::
05  00BC   258          RSB                                 ; RETURN TO MAIN ROUTINE
    00BD   259 COND4::
05  00BD   260          RSB                                 ; RETURN TO MAIN ROUTINE
    00BE   261 COND4_CLEANUP::
05  00BE   262          RSB                                 ; RETURN TO MAIN ROUTINE
    00BF   263 COND5::
05  00BF   264          RSB                                 ; RETURN TO MAIN ROUTINE
    00C0   265 COND5_CLEANUP::
05  00C0   266          RSB                                 ; RETURN TO MAIN ROUTINE
```

```
                                 00C1   268         .SBTTL  FORM_CONDS
                                 00C1   269 ;++
                                 00C1   270 ; FUNCTIONAL DESCRIPTION:
                                 00C1   271 ;
                                 00C1   272 ;               FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                 00C1   273 ;  THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                                 00C1   274 ;
                                 00C1   275 ; CALLING SEQUENCE:
                                 00C1   276 ;
                                 00C1   277 ;       BSBW FORM_CONDS
                                 00C1   278 ;
                                 00C1   279 ; INPUT PARAMETERS:
                                 00C1   280 ;
                                 00C1   281 ;       NONE
                                 00C1   282 ;
                                 00C1   283 ; IMPLICIT INPUTS:
                                 00C1   284 ;
                                 00C1   285 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                 00C1   286 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                 00C1   287 ;       FOR X = 1,2,3,4,5 :
                                 00C1   288 ;               CONDX_T - TITLE TEXT FOR CONDX TABLE
                                 00C1   289 ;               CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                                 00C1   290 ;               CONDX_C - CONTEXT OF THE CONDX TABLE
                                 00C1   291 ;               CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                                 00C1   292 ;
                                 00C1   293 ; OUTPUT PARAMETERS:
                                 00C1   294 ;
                                 00C1   295 ;       NONE
                                 00C1   296 ;
                                 00C1   297 ; IMPLICIT OUTPUTS:
                                 00C1   298 ;
                                 00C1   299 ;       NONE
                                 00C1   300 ;
                                 00C1   301 ; COMPLETION CODES:
                                 00C1   302 ;
                                 00C1   303 ;       NONE
                                 00C1   304 ;
                                 00C1   305 ; SIDE EFFECTS:
                                 00C1   306 ;
                                 00C1   307 ;       NONE
                                 00C1   308 ;
                                 00C1   309 ;--
                                 00C1   310
                                 00C1   311
                                 00C1   312
                                 00C1   313 FORM_CONDS::
                                 00C1   314         $FAO_S  MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                 00E0   315                                         ; FORMAT CONDITIONS HEADER MSG
                     FF1D'   30  00E0   316         BSBW    OUTPUT_MSG              ; ... AND PRINT IT
                 14     00   91  00E3   317         CMPB    #COND1_C,#NULL          ; IS CONDITION 1 NULL ?
                        03   12  00E6   318         BNEQU   10$                     ; NO -- CONTINUE
                      00CB   31  00E8   319         BRW     FORM_CONDSX             ; YES -- SUBROUTINE IS FINISHED
                                 00EB   320 10$:
  00000000'EF    00000039'EF   DE  00EB   321         MOVAL   COND1_T,MSG_A           ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF    0000005E'EF42   D0  00F6   322         MOVL    COND1_TAB[R2],MSG_B     ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
          00000000'EF     00   90  0102   323         MOVB    #COND1_C,MSG_CTXT       ; SAVE CONDITION 1 CONTEXT FOR FAO
                                 0109   324         MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

```
                       FEF4'  30  0109    325          BSBW    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 1 MSG
                 14      00   91  010C    326          CMPB    #COND2_C,#NULL                ; IS CONDITION 2 NULL ?
                         03   12  010F    327          BNEQU   20$                           ; NO -- CONTINUE
                       00A2   31  0111    328          BRW     FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
                                  0114    329 20$:
    00000000'EF    000000BC'EF    DE  0114    330          MOVAL   COND2_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
  00000000'EF    000000D4'EF43    D0  011F    331          MOVL    COND2_TAB[R3],MSG_B           ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
             00000000'EF     00   90  012B    332          MOVB    #COND2_C,MSG_CTXT             ; SAVE CONDITION 2 CONTEXT FOR FAO
                                  0132    333          MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
                       FECB'  30  0132    334          BSBW    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 2 MSG
                 14      04   91  0135    335          CMPB    #COND3_C,#NULL                ; IS CONDITION 3 NULL ?
                         03   12  0138    336          BNEQU   30$                           ; NO -- CONTINUE
                       0079   31  013A    337          BRW     FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
                                  013D    338 30$:
    00000000'EF    0000012F'EF    DE  013D    339          MOVAL   COND3_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
  00000000'EF    00000137'EF44    D0  0148    340          MOVL    COND3_TAB[R4],MSG_B           ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
             00000000'EF     04   90  0154    341          MOVB    #COND3_C,MSG_CTXT             ; SAVE CONDITION 3 CONTEXT FOR FAO
                                  015B    342          MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
                       FE96'  30  0167    343          BSBW    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 3 MSG
                 14      00   91  016A    344          CMPB    #COND4_C,#NULL                ; IS CONDITION 4 NULL ?
                         47   13  016D    345          BEQLU   FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
    00000000'EF    0000016E'EF    DE  016F    346          MOVAL   COND4_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
  00000000'EF    00000189'EF45    D0  017A    347          MOVL    COND4_TAB[R5],MSG_B           ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
             00000000'EF     00   90  0186    348          MOVB    #COND4_C,MSG_CTXT             ; SAVE CONDITION 4 CONTEXT FOR FAO
                                  018D    349          MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
                       FE70'  30  018D    350          BSBW    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 4 MSG
                 14      00   91  0190    351          CMPB    #COND5_C,#NULL                ; IS CONDITION 5 NULL ?
                         21   13  0193    352          BEQLU   FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
    00000000'EF    00000207'EF    DE  0195    353          MOVAL   COND5_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
  00000000'EF    00000213'EF46    D0  01A0    354          MOVL    COND5_TAB[R6],MSG_B           ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
             00000000'EF     00   90  01AC    355          MOVB    #COND5_C,MSG_CTXT             ; SAVE CONDITION 5 CONTEXT FOR FAO
                                  01B3    356          MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
                       FE4A'  30  01B3    357          BSBW    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 5 MSG
                                  01B6    358 FORM_CONDSX:
                              05  01B6    359          RSB                                   ; RETURN TO CALLER
```

```
01B7              .SBTTL  VERIFY
01B7      ;++
01B7      ; FUNCTIONAL DESCRIPTION:
01B7      ;
01B7      ;               VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
01B7      ; TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
01B7      ; COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
01B7      ; SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
01B7      ; ($CRETVA). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
01B7      ; BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
01B7      ; AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
01B7      ; COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
01B7      ; ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
01B7      ; THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
01B7      ; PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
01B7      ; WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
01B7      ; AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
01B7      ;
01B7      ; CALLING SEQUENCE:
01B7      ;
01B7      ;       BSBW VERIFY
01B7      ;
01B7      ; INPUT PARAMETERS:
01B7      ;
01B7      ;       NONE
01B7      ;
01B7      ; IMPLICIT INPUTS:
01B7      ;
01B7      ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01B7      ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01B7      ;       FOR X = 1,2,3,4,5 :
01B7      ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
01B7      ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
01B7      ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
01B7      ;                 FOR CONDX_E.
01B7      ;
01B7      ; OUTPUT PARAMETERS:
01B7      ;
01B7      ;       NONE
01B7      ;
01B7      ; IMPLICIT OUTPUTS:
01B7      ;
01B7      ;       VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
01B7      ;       IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
01B7      ;       ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
01B7      ;       AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
01B7      ;       ERRORS.
01B7      ;
01B7      ; COMPLETION CODES:
01B7      ;
01B7      ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
01B7      ;
01B7      ; SIDE EFFECTS:
01B7      ;
01B7      ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
01B7      ;       (VIA RSB) IF ERROR ENCOUNTERED.
01B7      ;
```

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                                   01B7   418 ;--
                                   01B7   419
                                   01B7   420
                                   01B7   421
                                   01B7   422 VERIFY::
             00000000'EF       95  01B7   423         TSTB    CFLAG                         ; SHOULD CONDITIONS BE PRINTED ?
                      03       13  01BD   424         BEQL    5$                            ; NO -- CONTINUE
                    FEFF       30  01BF   425         BSBW    FORM_CONDS                    ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
                                   01C2   426 5$:
             0000002C'EF       D4  01C2   427         CLRL    STARTADDR                     ; CLEAR STARTING ADDR OF AREA TO BE CREATED
 00000008'EF   00000240'EF46   D0  01C8   428         MOVL    COND5_E[R6],PAGCNT_ERG        ; GET PAGE COUNT
  00000034'EF    00000008'EF   D0  01D4   429         MOVL    PAGCNT_ERG,DISPL              ; ... AND REMEMBER IT FOR LATER
        01     000001F7'EF45   D1  01DF   430         CMPL    COND4_E[R5],#1                ; ARE PAGES IN MIDDLE OF A REGION ?
                      07       15  01E7   431         BLEQ    10$                           ; NO -- PAGCNT_ERG IS OK
        00000008'EF   05       C0  01E9   432         ADDL2   #5,PAGCNT_ERG                 ; YES -- ADD SOME PAGES
                                   01F0   433 10$:
                                   01F0   434         MODE    TO,20$,KRNL                   ; GO TO KERNEL MODE TO ISSUE SERVICE
                                   0213   435         $EXPREG_S PAGCNT_ERG,RETADR_ERG, -
                                   0213   436                 ACMODE[R4],COND4_E[R5]  ; ISSUE PRELIM S.S. TO GET SOME PAGES
                                   0234   437         MODE    FROM,20$                      ; BACK TO USER MODE
             0000000C'EF       D5  0235   438         TSTL    RETADR_ERG                    ; DID EXPREG DO ANYTHING ?
                      6C       12  023B   439         BNEQ    30$                           ; YES -- THAT'S FINE
  00000000'EF    00000000'8F   D0  023D   440         MOVL    #SS$_NORMAL,EXPV              ; NO -- LOAD EXPECTED AND
        00000000'EF   50       D0  0248   441         MOVL    R0,RECV                       ; ... RECEIVED VALUES, THEN EXIT
                                   024F   442         ERR_EXIT LONG,<UNEXPECTED RETADR PAIR RETURNED BY NON-SUBJECT>,-
                                   024F   443                         < EXPREG>
                                   02A9   444 30$:
  00000030'EF    00000010'EF   D0  02A9   445         MOVL    RETADR_ERG+4,ENDADDR          ; GET ENDING ADDR OF AREA TO BE CREATED
  0000002C'EF    0000000C'EF   D0  02B4   446         MOVL    RETADR_ERG,STARTADDR          ; GET TENTATIVE START ADDR OF AREA
  00000034'EF    00000008'EF   D1  02BF   447         CMPL    PAGCNT_ERG,DISPL              ; WERE 5 PAGES ADDED TO DISPLACEMENT ?
                      1C       13  02CA   448         BEQL    45$                           ; NO -- LEAVE STARTADDR ALONE
        59     00000051'EF     D0  02CC   449         MOVL    PAGESIZE,R9                   ; YES -- STARTADDR TO BE MODIFIED
        03 000001F7'EF45       E9  02D3   450         BLBC    COND4_E[R5],40$               ; IF PROGRAM REGION, LEAVE R9 ALONE
                59    59       CE  02DB   451         MNEGL   R9,R9                         ; PROGRAM REGION -- NEGATE R9
                                   02DE   452 40$:
                59    05       C4  02DE   453         MULL2   #5,R9                         ; GET LENGTH OF 5 PAGES
        0000002C'EF   59       C0  02E1   454         ADDL2   R9,STARTADDR                  ; COMPUTE START ADDR OF AREA TO BE CREATED
                                   02E8   455 45$:
                                   02E8   456         MODE    TO,50$,KRNL                   ; INTO KERNEL TO DO A STORE
  00000030'FF    00000000'EF   90  030B   457         MOVB    ONES,@ENDADDR                 ; INDICATE WE WERE HERE
                                   0316   458         MODE    FROM,50$                      ; ... AND GET BACK TO USER
                01    52       91  0317   459         CMPB    R2,#1                         ; 2ND CONDITION 1 ELEMENT ?
                      03       12  031A   460         BNEQU   73$                           ; NO -- CONTINUE
                    015F       31  031C   461         BRW     71$                           ; YES -- LEAVE EXPANDED REGION AS IS
                                   031F   462 73$:
                02    52       91  031F   463         CMPB    R2,#2                         ; 3RD CONDITION 1 ELEMENT ?
                      03       12  0322   464         BNEQU   74$                           ; NO -- CONTINUE
                    00E8       31  0324   465         BRW     60$                           ; YES -- GO CONTRACT REGION
                                   0327   466 74$:
  00000014'EF    0000002C'EF   D0  0327   467         MOVL    STARTADDR,INADR_CVA           ; MUST BE 1ST COND 1 ELEMENT
  00000018'EF    00000030'EF   D0  0332   468         MOVL    ENDADDR,INADR_CVA+4           ; ... GET READY FOR DELTVA
                                   033D   469         MODE    TO,69$,KRNL                   ; NEED KERNEL MODE
                                   0360   470         $DELTVA_S INADR=INADR_CVA, -
                                   0360   471                 ACMODE=ACMODE[R4]             ; DELETE EXPANDED AREA
                                   0376   472         MODE    FROM,69$                      ; BACK TO USER MODE
                                   0377   473         SS_CHECK NORMAL                       ; DID IT GO OK ?
                                   03A5   474         MODE    TO,70$,KRNL                   ; INTO KERNEL FOR A PRELIM CRETVA
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                                      03C8             $CRETVA_S INADR=INADR_CVA, ACMODE=ACMODE[R4]
                                      03DE             MODE     FROM,70$                 ; USER MODE
                                      03DF             SS_CHECK NORMAL                   ; CHECK FOR NORMAL RETURN
                          6F     11   040D             BRB      71$                      ; ... AND GO DETERMINE ORDER OF  INADR PAIR
                                      040F       60$:
                                      040F             MODE     TO,68$,KRNL              ; KERNEL MODE FOR CNTREG
                                      0432             $CNTREG_S DISPL,,ACMODE[R4],COND4_E[R5]
                                      044F                                               ; CONTRACT REQUESTED SIZE (NOT THE EXTRA 5)
                                      044F             MODE     FROM,68$                 ; ... AND GET BACK TO USER MODE
                                      0450             SS_CHECK NORMAL                   ; CHECK FOR NORMAL RETURN
                                      047E       71$:
00000030'EF   0000002C'EF        D1   047E             CMPL     STARTADDR,ENDADDR        ; FIND LARGER ADDRESS
                          10     1A   0489             BGTRU    72$                      ; STARTADDR LARGER
         5A   0000002C'EF        D0   048B             MOVL     STARTADDR,R10            ; SMALLER VALUE IN R10,
         5B   00000030'EF        D0   0492             MOVL     ENDADDR,R11              ; ... LARGER IN R11
                          0E     11   0499             BRB      75$                      ; CONTINUE
                                      049B       72$:
         5A   00000030'EF        D0   049B             MOVL     ENDADDR,R10              ; SMALLER VALUE IN R10,
         5B   0000002C'EF        D0   04A2             MOVL     STARTADDR,R11            ; ... LARGER IN R11
                                      04A9       75$:
                          53     95   04A9             TSTB     R3                       ; 1ST CONDITION 2 ELEMENT ?
                          10     13   04AB             BEQL     77$                      ; YES -- LOWER ADDRESS GOES FIRST
      0000001C'EF         5B     D0   04AD             MOVL     R11,INADR                ; NO -- HIGHER ADDRESS GOES FIRST
      00000020'EF         5A     D0   04B4             MOVL     R10,INADR+4              ; .......
                          0E     11   04BB             BRB      79$                      ; CONTINUE
                                      04BD       77$:
      0000001C'EF         5A     D0   04BD             MOVL     R10,INADR                ; LOWER ADDRESS GOES FIRST
      00000020'EF         5B     D0   04C4             MOVL     R11,INADR+4              ; ........
                                      04CB       79$:
                                      04CB             MODE     TO,80$,KRNL              ; INTO KERNEL MODE
                                      04EE       ;
                                      04EE       ; ****** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE ******
                                      04EE       ;
                                      04EE             $CRETVA_S INADR,RETADR,ACMODE[R4]
                                      0508             MODE     FROM,80$                 ; BACK TO USER
      00000000'8F         50     D1   0509             CMPL     R0,#SS$_NORMAL           ; CODE RECEIVED = CODE EXPECTED ?
                          61     13   0510             BEQLU    81$                      ; YES -- MORE VERIFYING
00000000'EF   00000000'8F        D0   0512             MOVL     #SS$_NORMAL,EXPV         ; NO -- LOAD UP EXPECTED AND
      00000000'EF         50     D0   051D             MOVL     R0,RECV                  ; ... RECEIVED VALUES, THEN EXIT
                                      0524             ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM CRETVA>
                                      0573       81$:
00000024'EF   0000001C'EF        D1   0573             CMPL     INADR,RETADR             ; DID CRETVA GIVE US THE 1ST PAGE ?
                          0F     12   057E             BNEQU    82$                      ; NO -- ERROR
00000028'EF   00000020'EF        D1   0580             CMPL     INADR+4,RETADR+4         ; HOW ABOUT THE WHOLE RANGE ?
                          02     12   058B             BNEQU    82$                      ; NO -- ERROR
                          67     11   058D             BRB      83$                      ; CONTINUE
                                      058F       82$:
00000000'EF   0000001C'EF        7D   058F             MOVQ     INADR,EXPV               ; LOAD UP EXPECTED AND
00000000'EF   00000024'EF        7D   059A             MOVQ     RETADR,RECV              ; ... RECEIVED VALUES, THEN EXIT
                                      05A5             ERR_EXIT QUAD,<UNEXPECTED VALUE FROM CRETVA FOR>,-
                                      05A5                              < RETADR PAIR>
                                      05F6       83$:
         03   0000015E'EF44      D1   05F6             CMPL     ACMODE[R4],#PSL$C_USER   ; USER MODE PAGES REQUESTED ?
                          52     13   05FE             BEQLU    90$                      ; YES -- GO ON
         00   0000015E'EF44      D1   0600             CMPL     ACMODE[R4],#PSL$C_KERNEL ; KERNEL MODE PAGES REQUESTED ?
                          25     13   0608             BEQLU    84$                      ; YES -- GO CHG TO KERNEL MODE
                                      060A             MODE     TO,85$,EXEC              ; GET INTO EXEC MODE TO ACCESS NEW PAGES
                          23   11 062D   532          BRB     90$                       ; ... AND CONTINUE
                                  062F   533 84$:
                                  062F   534          MODE    TO,85$,KRNL               ; GET INTO KERNEL MODE TO ACCESS NEW PAGES
                                  0652   535 90$:
                 00000038'EF   94 0652   536          CLRB    NZERR                     ; INDICATE NO NON-ZERO ERROR
                                  0658   537 91$:
                          6A   95 0658   538          TSTB    (R10)                     ; DOES THIS PAGE HAVE A ZERO BYTE ?
                          09   12 065A   539          BNEQ    92$                       ; NO -- GO INDICATE ERROR
            6A   00000000'EF   90 065C   540          MOVB    ONES,(R10)                ; STORE INTO PAGE -- NO ACCVIO EXPECTED
                          1A   11 0663   541          BRB     93$                       ; GO LOOP TO NEXT PAGE
                                  0665   542 92$:
   00000038'EF   00000000'EF   90 0665   543          MOVB    ONES,NZERR                ; INDICATE A NON-ZERO ERROR WAS FOUND
                 00000000'EF   94 0670   544          CLRB    EXPV                      ; LOAD UP EXPECTED AND
            00000000'EF   6A   90 0676   545          MOVB    (R10),RECV                ; ... RECEIVED VALUES
                          0A   11 067D   546          BRB     100$                      ; GO GET USER MODE BACK
                                  067F   547 93$:
   FFCF 5A   00000051'EF   5B   F1 067F   548          ACBL    R11,PAGESIZE,R10,91$      ; ADVANCE TO NEXT PAGE
                                  0689   549 100$:
          03   0000015E'EF44   D1 0689   550          CMPL    ACMODE[R4],#PSL$C_USER    ; USER MODE PAGES ?
                          01   13 0691   551          BEQLU   110$                      ; YES -- NO NEED TO CHG MODE
                                  0693   552          MODE    FROM,85$                  ; GET BACK TO USER MODE
                                  0694   553 110$:
                 00000038'EF   95 0694   554          TSTB    NZERR                     ; NON-ZERO ERROR FOUND ?
                          4B   13 069A   555          BEQL    VERIFYX                   ; NO -- EVERYTHING VERIFIES
                                  069C   556          ERR_EXIT BYTE,<A PAGE IN THE CREATED AREA IS NON-ZERO>
                                  06E7   557 VERIFYX:
                               05 06E7   558          RSB                               ; RETURN TO CALLER
```

```
                             06E8   560         .SBTTL  VFY_CLEANUP
                             06E8   561 ;++
                             06E8   562 ; FUNCTIONAL DESCRIPTION:
                             06E8   563 ;
                             06E8   564 ;               VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
                             06E8   565 ; EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
                             06E8   566 ; ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
                             06E8   567 ; ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
                             06E8   568 ; ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
                             06E8   569 ; IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
                             06E8   570 ; WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
                             06E8   571 ; POSSIBLY DISCOVERING A SECOND ERROR.
                             06E8   572 ;
                             06E8   573 ; CALLING SEQUENCE:
                             06E8   574 ;
                             06E8   575 ;       BSBW VFY_CLEANUP
                             06E8   576 ;
                             06E8   577 ; INPUT PARAMETERS:
                             06E8   578 ;
                             06E8   579 ;       NONE
                             06E8   580 ;
                             06E8   581 ; IMPLICIT INPUTS:
                             06E8   582 ;
                             06E8   583 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                             06E8   584 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                             06E8   585 ;       FOR X = 1,2,3,4,5 :
                             06E8   586 ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                             06E8   587 ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                             06E8   588 ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                             06E8   589 ;                 FOR CONDX_E.
                             06E8   590 ;
                             06E8   591 ; OUTPUT PARAMETERS:
                             06E8   592 ;
                             06E8   593 ;       NONE
                             06E8   594 ;
                             06E8   595 ; IMPLICIT OUTPUTS:
                             06E8   596 ;
                             06E8   597 ;       NONE
                             06E8   598 ;
                             06E8   599 ; COMPLETION CODES:
                             06E8   600 ;
                             06E8   601 ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                             06E8   602 ;
                             06E8   603 ; SIDE EFFECTS:
                             06E8   604 ;
                             06E8   605 ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                             06E8   606 ;       (VIA RSB) IF ERROR ENCOUNTERED.
                             06E8   607 ;
                             06E8   608 ;--
                             06E8   609
                             06E8   610
                             06E8   611
                             06E8   612 VFY_CLEANUP::
        0000002C'EF     D5   06E8   613         TSTL    STARTADDR               ; DID REGION EVER GET ACQUIRED ?
                 03     12   06EE   614         BNEQ    5$                      ; YES -- CONTINUE
               00F3     31   06F0   615         BRW     VFY_CLEANUPX            ; NO -- JUST GET OUT NOW
                             06F3   616 5$:
```

```
 0000001C'EF   0000002C'EF  D0  06F3              MOVL     STARTADDR,INADR            ; GET READY FOR DELTVA
 00000020'EF   00000030'EF  D0  06FE              MOVL     ENDADDR,INADR+4            ; .........
                                0709              MODE     TO,10$,KRNL                ; KERNEL MODE FOR DELETE
                                072C              $DELTVA_S INADR=INADR, ACMODE=ACMODE[R4]
                                0742                                                  ; DELETE CREATED AREA
                                0742              MODE     FROM,10$                   ; BACK TO USER MODE
                                0743              SS_CHECK NORMAL                     ; CHECK FOR NORMAL RETURN
          01   000001F7'EF45  D1  0771              CMPL     COND4_E[R5],#1             ; WAS AREA IN 'MIDDLE'' OF A REGION ?
                          6B  1B  0779              BLEQU    VFY_CLEANUPX               ; NO -- TIME TO EXIT
                                077B              MODE     TO,20$,KRNL                ; YES -- KERNEL MODE TO ISSUE CNTREG
                                079E              $CNTREG_S #5,,ACMODE[R4],COND4_E[R5] ; GET RID OF THE EXTRA 5 PAGES
                                07B7              MODE     FROM,20$                   ; BACK TO USER MODE
                                07B8              SS_CHECK NORMAL                     ; CHECK FOR NORMAL RETURN
                                07E6      VFY_CLEANUPX:
                            05  07E6              RSB                                 ; RETURN TO CALLER
                                07E7              .END
```

```
$$$$                            = 000006A6 R     04      ENDADDR                           00000030 R     03
$$$CHARS                        = 00000026               EXPV                              ********   X   04
$$$CHARS1                       = 00000008               FAO_DESC                          ********   X   04
$$$CHARS2                       = 0000000B               FAO_LEN                           ********   X   04
$$$CHARS3                       = 0000000B               FORM_CONDS                        000000C1 RG    04
$$$CHARS4                       = 00000000               FORM_CONDSX                       000001B6 R     04
$$$CHARS5                       = 00000000               INADR                             0000001C R     03
$$$COND_A                       = 00000002               INADR_CVA                         00000014 R     03
$$$STRINGS                      = 00000001               LONG                            = 00000004  G
$$$STRINGS2                     = 00000005               MOD_MSG_CODE                      ********   X   04
$$T1                            = 00000000               MOD_MSG_PRINT                     ********   X   04
$$T2                            = 00000004               MSG1_INP_CTL                      00000019 R     02
ACMODE                            0000015E R     03      MSG3_ERR_CTL                      00000039 RG    02
BYTE                            = 00000001  G            MSG_A                             ********   X   04
CFLAG                             ********   X   04      MSG_B                             ********   X   04
CHMRTN                            ********   X   04      MSG_CTXT                          ********   X   04
CHM_CONT                          ********   X   04      MSG_DATA1                         ********   X   04
COMP_SC                           ********   X   04      NOTARG                          = 00000000  G
COND1                             000000B7 RG    04      NULL                            = 00000014  G
COND1_C                         = 00000000               NZERR                             00000038 R     03
COND1_CLEANUP                     000000B8 RG    04      ONES                              ********   X   04
COND1_E                           000000BC R     03      OUTPUT_MSG                        ********   X   04
COND1_H                           0000005D RG    03      PAGCNT_ERG                        00000008 R     03
COND1_T                           00000039 R     03      PAGESIZE                          00000051 R     02
COND1_TAB                         0000005E R     03      PCV                               ********   X   04
COND2                             000000B9 RG    04      PHD$Q_PRIVMSK                   = 00000000
COND2_C                         = 00000000               PRIVMASK                          00000000 R     03
COND2_CLEANUP                     000000BA RG    04      PRIV_ARGS                       = 00000002
COND2_E                           0000012F R     03      PROCESS_ERR                       ********   X   04
COND2_H                           000000D3 RG    03      PSL$C_EXEC                      = 00000001
COND2_T                           000000BC R     03      PSL$C_KERNEL                    = 00000000
COND2_TAB                         000000D4 R     03      PSL$C_SUPER                     = 00000002
COND3                             000000BB RG    04      PSL$C_USER                      = 00000003
COND3_C                         = 00000004               QUAD                            = 00000008  G
COND3_CLEANUP                     000000BC RG    04      RECV                              ********   X   04
COND3_E                           0000015E R     03      REST_REGS                         ********   X   04
COND3_H                           00000136 RG    03      RETADR                            00000024 R     03
COND3_T                           0000012F R     03      RETADR_ERG                        0000000C R     03
COND3_TAB                         00000137 R     03      SAVE_REGS                         ********   X   04
COND4                             000000BD RG    04      SS$_NORMAL                        ********   X   04
COND4_C                         = 00000000               STARTADDR                         0000002C R     03
COND4_CLEANUP                     000000BE RG    04      SUCCESS                           ********   X   04
COND4_E                           000001F7 R     03      SYS$CMEXEC                        ********  GX   04
COND4_H                           00000188 RG    03      SYS$CMKRNL                        ********  GX   04
COND4_T                           0000016E R     03      SYS$CNTREG                        ********  GX   04
COND4_TAB                         00000189 R     03      SYS$CRETVA                        ********  GX   04
COND5                             000000BF RG    04      SYS$DELTVA                        ********  GX   04
COND5_C                         = 00000000               SYS$EXPREG                        ********  GX   04
COND5_CLEANUP                     000000C0 RG    04      SYS$FAO                           ********   X   04
COND5_E                           00000240 R     03      SYS$SETPRN                        ********  GX   04
COND5_H                           00000212 RG    03      SYS$SETPRV                        ********  GX   04
COND5_T                           00000207 R     03      TESTNUM                           ********   X   04
COND5_TAB                         00000213 R     03      TEST_MOD_NAME                     00000000 RG    02
CTL$GL_PHD                        ********   X   04      TEST_MOD_NAME_D                   00000009 R     02
DESC                            = 00000010  G            TEST_MOD_SUCC                     ********   X   04
DISPL                             00000034 R     03      TMD_ADDR                          ********   X   04
EFLAG                             ********   X   04      TM_CLEANUP                        000000B3 RG    04
```

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TM_SETUP                        00000000 RG     04
VERIFY                          000001B7 RG     04
VERIFYX                         000006E7 R      04
VFY_CLEANUP                     000006E8 RG     04
VFY_CLEANUPX                    000007E6 R      04
WORD                          = 00000002  G
WRITE_MSG2                      ********   X    04

                                              +----------------+
                                              ! Psect synopsis !
                                              +----------------+

PSECT name                     Allocation          PSECT No.  Attributes
----------                     ----------          ---------  ----------
.  ABS  .                      00000000  (     0.)  00 (  0.)  NOPIC   USR   CON   ABS   LCL NOSHR NOEXE NORD  NOWRT NOVEC BYTE
$ABS$                          00000000  (     0.)  01 (  1.)  NOPIC   USR   CON   ABS   LCL NOSHR   EXE   RD    WRT NOVEC BYTE
RODATA                         00000055  (    85.)  02 (  2.)  NOPIC   USR   CON   REL   LCL NOSHR NOEXE   RD  NOWRT NOVEC LONG
RWDATA                         0000024C  (   588.)  03 (  3.)  NOPIC   USR   CON   REL   LCL NOSHR NOEXE   RD    WRT NOVEC LONG
SATSSS72                       000007E7  (  2023.)  04 (  4.)  NOPIC   USR   CON   REL   LCL NOSHR   EXE   RD    WRT NOVEC BYTE

                                           +------------------------+
                                           ! Performance indicators !
                                           +------------------------+

Phase                    Page faults    CPU Time       Elapsed Time
-----                    -----------    --------       ------------
Initialization                   35    00:00:00.07    00:00:00.33
Command processing              133    00:00:00.65    00:00:02.72
Pass 1                          269    00:00:08.49    00:00:16.59
Symbol table sort                 0    00:00:00.56    00:00:01.15
Pass 2                          130    00:00:02.31    00:00:04.55
Symbol table output              15    00:00:00.09    00:00:00.09
Psect synopsis output             2    00:00:00.03    00:00:00.03
Cross-reference output            0    00:00:00.00    00:00:00.00
Assembler run totals            586    00:00:12.22    00:00:25.47

The working set limit was 1500 pages.
46744 bytes (92 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 350 non-local and 80 local symbols.
632 source lines were read in Pass 1, producing 27 object records in Pass 2.
38 pages of virtual memory were used to define 29 macros.

                                          +--------------------------+
                                          ! Macro library statistics !
                                          +--------------------------+

Macro library name                        Macros defined
------------------                        --------------
_$255$DUA28:[SHRLIB]UETP.MLB;1                     9
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                     1
_$255$DUA28:[SYSLIB]STARLET.MLB;2                 16
TOTALS (all libraries)                            26

677 GETS were required to define 26 macros.

There were no errors, warnings or information messages.
```

```
MACRO/LIS=LIS$:SATSSS72/OBJ=OBJ$:SATSSS72 MSRC$:SATSSS72/UPDATE=(ENH$:SATSSS72)+EXECML$/LIB+SHRLIB$:UETP/LIB
```

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